

# TECHNICAL DATA SHEET

## UPM Betula

ECF Bleached Birch Kraft Pulp

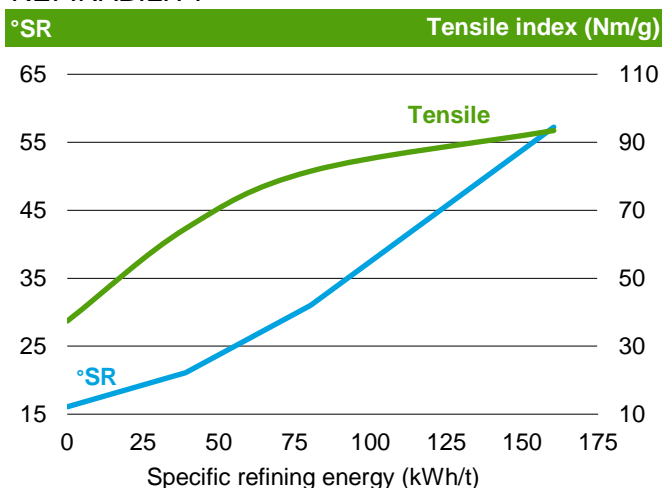
Pulp mill: UPM Pietarsaari

Date of issue: 23.11.2020

### PULP CHARACTERISTICS

	Typical value	Spec
Brightness, ISO % ISO 2470-1	89	≥ 88
Impurities, mm <sup>2</sup> /kg ISO 5350-2	2	
Extractives, % SCAN-CM 49:93	0,2	≤ 0,4
Ash content, % ISO 1762	0,4	≤ 0,7
pH 6388-2	5,5	5,0-7,0

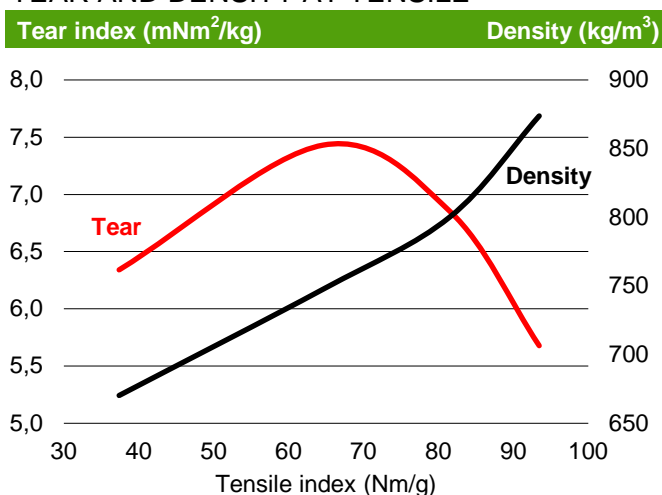
### REFINABILITY



### FIBRE CHARACTERISTICS

	Typical value
Fibre length, mm Metso FS5	1,04
Coarseness, mg/m Metso FS5	0,08

### TEAR AND DENSITY AT TENSILE



### RAW MATERIAL

#### Hardwood

Birch, Aspen and Sawdust

Specific Refining Energy	CSF	SR number	Tensile index	Stiffness index	Tear index	Scott Bond	Density	Opacity	Air res.
kWh/t	ml		Nm/g	kNm/g	mNm <sup>2</sup> /g	J/m <sup>2</sup>	kg/m <sup>3</sup>	%	s
0	596	16	37	5,8	6,3	184	670	73,9	3,2
39	508	21	65	7,6	7,4	388	748	69,3	9
80	376	31	82	8,5	6,9	794	800	66,2	48
160	160	57	93	9,3	5,7	1719	874	59,8	1747
18	555	18	50	6,6	6,8	279	706	71,8	5,7
52	466	24	70	7,9	7,2	518	764	68,3	21
137	222	50	90	9,1	6,0	1452	853	61,6	1257
31	527	20	59	7,2	7,2	344	731	70,3	7,4
55	456	25	71	7,9	7,2	548	768	68,1	24
76	390	30	80	8,4	6,9	753	795	66,5	44

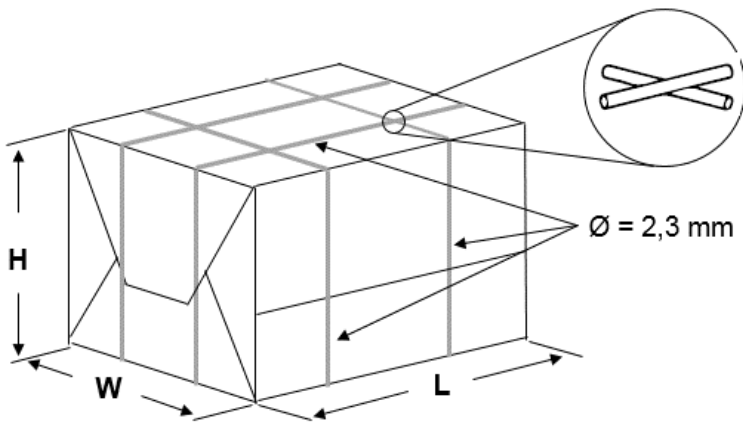
Typical values are averages from all mill quality control samples during 2019-2020. They are given in good faith to represent mill performance and do not constitute contractual undertaking. Values in the table are mean (indicative) values from pulp testing with Voith-Sulzer refining, using standard water. Specific Edge Load 0,5 J/m, ISO testing methods (H 50%, 23 °C, 60 gr/m<sup>2</sup> sheets).

## UPM Betula Pietarsaari

### Bale marking

	UPM Betula	BHKP	
	8 B	54504	FIN
	Mill No	Product	Lot No

### Standard bale



### Sheets

<b>Size:</b>	84 x 73 cm
<b>Grammage:</b>	850 g/m <sup>2</sup>

### Standard bale

<b>Size:</b>	L = 88 cm
	W = 76 cm
	H = 40 cm

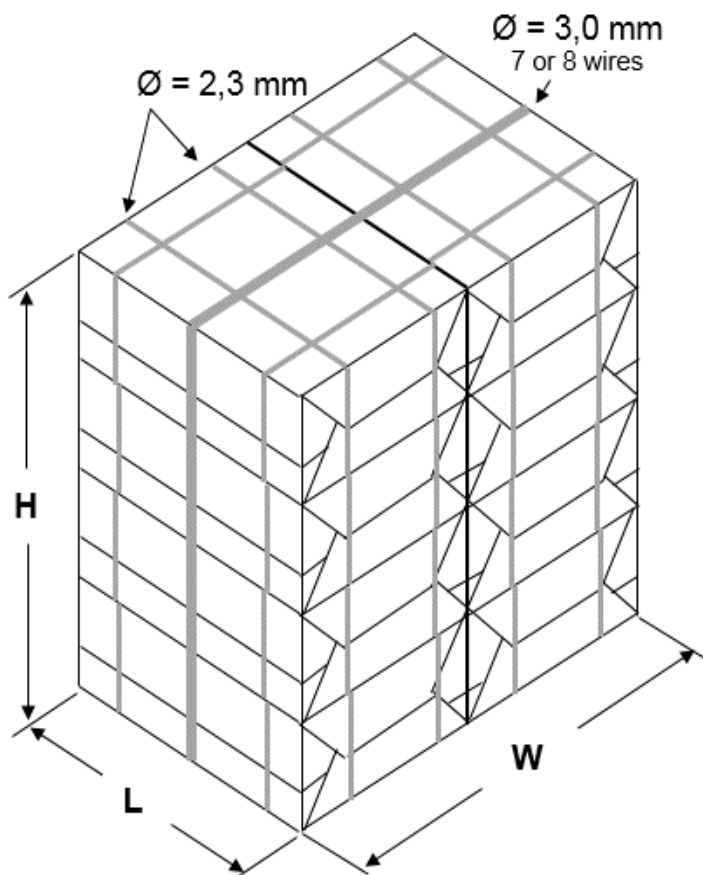
**Weight:** 250 kg

**Wrapping:** Pulp sheets (unwrapped on demand)

**Markings:** Red watersoluble inkjet printing.  
Country, company name, product code and bale number on both sides.

**Wires:** 4 galvanized wires,  
diameter 2,3 mm.

### Standard bale unit configuration



### Standard bale unit configuration

#### Standard bale units

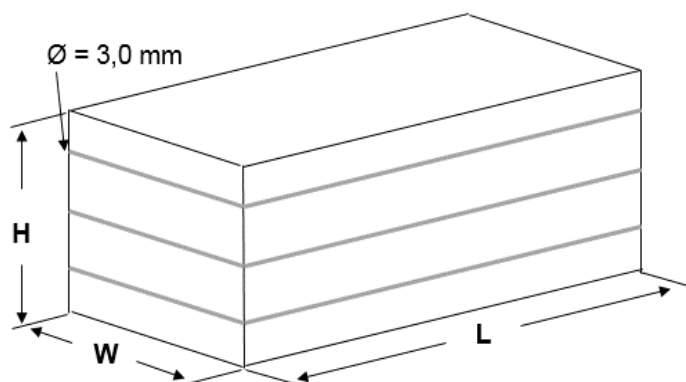
<b>Size:</b>	L = 88 cm
	W = 152 cm
	H = 160 cm

**Weight:** 2000 kg (2 x 1000 kg)

**Wires:** Vessel 7 or 8 galvanized wires

## UPM Betula Pietarsaari

### Big bale



#### Sheets

**Size:** 84 x 73 cm

**Grammage:** 850 g/m<sup>2</sup>

#### Big bale

**Size:** L = 160 cm

W = 86 cm

H = 75 cm

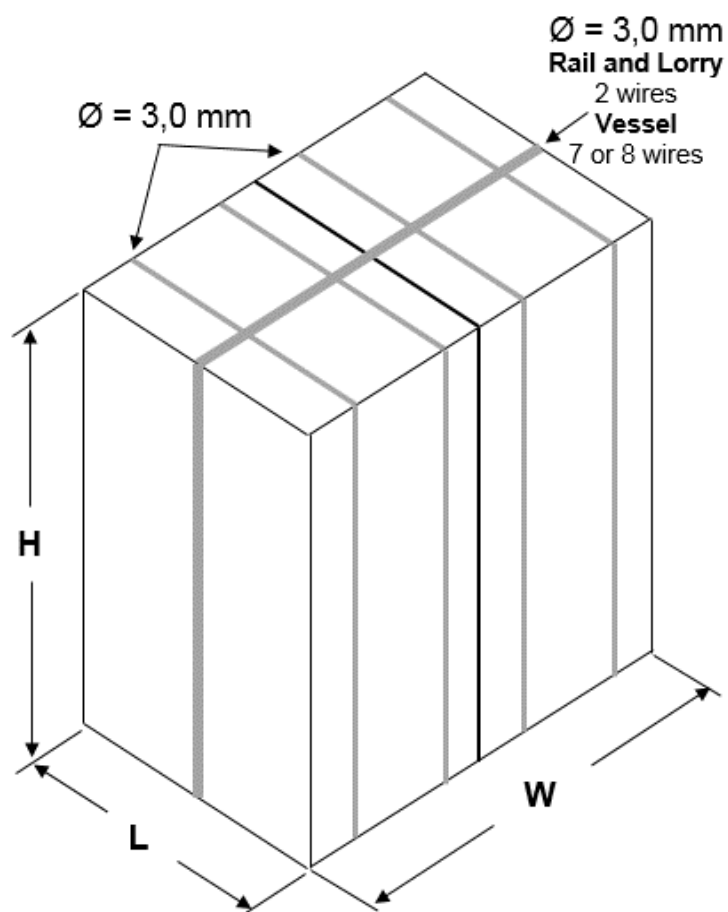
**Weight:** 1000 kg

**Wrapping:** No wrapping

**Markings:** Red watersoluble inkjet printing.  
Country, company name, product code  
and bale number on both  
sides.

**Wires:** 3 galvanized wires,  
diameter 3,0 mm

### Big bale unit configuration



#### Big bale unit configuration

##### Big bale units

**Size:** L = 86 cm

W = 150 cm

H = 160 cm

**Weight:** 2000 kg (8 x 250 kg)

**Wires:** Vessel 7 or 8 galvanized  
wires, Rail and Lorry 2 wires  
diameter 3,0 mm

#### UPM-Kymmene Corporation

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